

## NOAA Education Council Meeting

Date/Time: November 19, 2014 / 1:00–4:00 pm  
Location: SSMC3, Room 14836  
Dial-in: 866.901.0711  
Passcode: 8134683, leader code: 1144183  
Contact: Lisa Nakamura (202) 482-3139, Marissa Jones (202) 482-4592

Adobe Connects Link to Meeting: <http://connectpro46305642.adobeconnect.com/edcouncil/>

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## AGENDA

- 1:00 Welcome/Opening remarks - Louisa Koch
- 1:15 NGSS Working Group Report Out (*Input Requested*) - Molly Harrison and Peg Steffen (15 min presentation/ 15 min discussion)
- 1:45 Distance Learning Working Group Report Out (*Input Requested*) - Bruce Moravchik and Peg Steffen (15 min presentation/ 15 min discussion)
- 2:15 Break
- 2:30 Partnership Working Group Report Out (*Input Requested*) - Frank Niepold and Diana Payne (15 min presentation/ 15 min discussion)
- 3:00 Strategic Plan Update: New Timeline and Goal Front Matter Writing Sessions (*Input Requested*) - Marissa Jones (5 min presentation/ 10 min discussion)
- 3:15 Opportunity to support Department of Education's 21st Century Community Learning Centers (*Input Requested*) - Louisa Koch (15 min discussion)
- 3:30 Updates and announcements

## Attendance

**In person:** Louisa Koch (LK), Bruce Moravchik (BMo), Frank Niepold (FN), June Teisan (JT), Kristen Jabanoski (KJ), Leah Henry (LH), Lisa Nakamura (LN), Marissa Jones (MJ), Marlene Kaplan (MK), Molly Harrison (MH), Peg Steffen (PS), Ron Gird (RG), Sarah Schoedinger (SSch), Stacey Rudolph (SR)

**On the phone/chat:** Amy Clark (AC), Carrie McDougall (CMc), Christopher Nelson (CN), Diana Paine (DP), Lisa Hiruki-Raring (LHR), Maia McGuire (MMc), Nina Jackson (NJ), Paula Keener (PK), Rochelle Plutchak (RP), Shannon Sprague (SSp)

## Summary of Action Items and Decisions:

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None.

## Welcome/Opening Remarks

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- LK: This is Knauss Placement Week. They are interviewing in NOAA and it's exciting to have them around. We have a couple of announcements about personnel. Jackie Bray announced that she's taking a job in New York and is heading out in December. Mark Seiler is NOAA's new chief financial officer; he used to be the deputy CFO for the Treasury. Since Vice Admiral Manson Brown has been nominated as the Assistant Secretary for Environmental Observation and Prediction, he has come on as a consultant and he's taking quite a few meetings inside NOAA. He is not yet confirmed, but he did accept an Education 101 briefing. If you have issues that you'd like to bring forward with him let me know. He's likely to be confirmed by Congress. Stephen Volz, new AA for NESDIS is onboard and getting up to speed.
- LK: Finally, after three years of trying, I was able to meet with our Office of Management and Budget examiner. She was a detailee, but that's huge progress. She is involved in the Committee on Science, Technology, Engineering and Math. The President's Budget Passback is due on December 2. We will get information on what to expect for FY16.
- LK: Finally, I want to thank you for submitting to the Unified Data Call. We have most of the data and Lisa has communicated with all of you.
- LK: We also want to talk about a potential partnership with the Department of Education's 21<sup>st</sup> Century Community Learning Centers. They contacted us and asked us to enter into a memorandum of understanding (MOU) with them to provide content to their CCLCs. They would give us \$300K and we would work with them to identify 20-25 CLCs in 5 or more regions and we would be expected to provide 1-2 hours of education activities over a period of 6-10 weeks. We have to provide three things: 1) authentic STEM experience for the kids, 2) build capacity of CCLC staff, and 3) have kids interact with scientists on the projects they would be working on. We are looking for someone to take this on. It is not a small undertaking.
  - PS: How many people are you looking for?
  - LK: I think it would be best for someone to be in charge. The major decision is whether we're going to go to external partners, like the American Meteorological Society (AMS) or CoCoRaHS, or the B-WET grantees, or whether we want to handle it in house. We're looking for your thoughts on how to approach this.
  - We will follow up on this at 3 pm.

## NGSS Working Group Report Out (*Input Requested*) - Molly Harrison and Peg Steffen (15 min presentation/ 15 min discussion)

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See presentation.

- FN: Are you finding any gaps in the process of developing Next Generation Science Standards (NGSS) materials? The end framework offers a guide. Are you finding anything that's missing?
  - PS: There's so little out there that meets the standards. The gaps are so large you could drive a semi through. The Council of State Science Supervisors (CSSS) is taking baby steps. Text books and curriculum developers have gone through and tagged which activities and concepts are good for NGSS, but that's really not what they are looking for.
  - FN: I am asking because I think what's going to happen for the first wave of NGSS curriculum is to take pieces of existing resources and string them together to build a curriculum.

- PS: They're not even doing that, though.
  - SS: They've got writing teams. California, for example, is revising the curriculum and going back to the drawing board. That will drive what goes into the class room and the assessments.
  - PS: Going back to the drawing board, you almost have to.
  - FN: I was thinking that when we go from scratch, we find the closest thing and rewrite it.
  - PS: The rewriting is what's going to take a lot of time.
- LK: Peg, you guys have done this. My sense of what takes a lot of time is that you find the things that are out there and lay them out from kindergarten to 12<sup>th</sup> grade, but the time consuming this is to actually make them link. The magic for NGSS is the sequence.
  - PS: The paradigm shift is that teachers don't usually talk to other teachers. They don't typically cross grade levels. But with NGSS, these teachers are going to have to start talking to each other. This shift in the educational system will take years.
- LK: Two what extent are the users individual teachers looking for things for their classrooms compared to individuals like those on the CSSS looking for the sequence?
  - PS: I propose that we brief this at the spring meeting [of the CSSS] in Chicago. We will ask for feedback from the Supervisors then.
  - FN: We can think about this like a string of pearls where the pearls are topics.
  - MH: We are crafting existing and new materials in order to make this work and pull in the three components of NGSS.
- LN: Who is the audience?
  - SSCh: Practitioners, people responsible for ensuring that there's implementation of these curriculum standards. It's teachers and informal educators, principals, and more.
  - MH: The day-to-day teachers are saying, "Tell me about it when you've got something for me to do."
  - PS: We didn't set out to develop a curriculum. We're developing a process and there's a learning curve for us. It's about making our materials more valuable. I don't feel that all of our material needs to be in a sequence by 2016 to serve Maryland. That's not possible given staff time.
- SSCh: Would the training be on the process you developed?
  - MH: That's what we need to figure out. It's a potential process.
  - PS: We did some of that with our second webinar.
  - MH: Some of the feedback that we received on the second webinar was that it stressed people out. People felt that it was more work than they can handle.
- LHR: I thought what would be useful is if you could a workshop where we could bring our own material. Part of the hesitation and feeling overwhelmed was trying to understand to use what you did on your materials for our materials. It would be nice to have a workshop like the ones that Office of Education had on logic models. It would also be helpful to know how much time to expect to spend on it in case we wanted to get contractors.
  - PS: It depends on the skill of the contractor and the number of modules.
  - FN: It would be good if we had a mechanism for coordinating these efforts.
  - SSCh: It's going to be a long-term commitment. It will evolve.
- LK: If I remember correctly, when it was set up, it was intended to be a coordination group. Then the group realized that before they could teach others how to do it they had to figure it out for themselves and then they discovered that it was much more work than anticipated. And you still need to get feedback from your key audience. What started out as a working group ended up as a focused project. NGSS is going to continue to be important to us and when we make the Implementation Plan we are going to have to continue to re-weigh these things and decide what's important. I think you have made a significant contribute and put NOAA on the map in a difficult area. The webinars are a valuable set of internal resources.

- SSch: You might consider showing this to other, external audiences such as the National Marine Educators Association (NMEA). The NMEA Ocean Literacy committee is mapping the Framework to NGSS and we will have that ready to share in the next couple of months.
- FN: Groups might be able to combine and put together an NGSS sequence. Not everyone has to take on anything. It could work to have a digital strategy.
- LN: You ended up rolling up your sleeves and doing the work for developing the oyster sequence. How is your time best spent moving forward? Do you see an opportunity for coordination across NOAA programs? Can the Council help with that?
- MH: Peg and I like the thought of developing another module. It's for the Council to decide whether there's a role for a coordination function and if it's a priority.
- PS: I can see the use for a formal work group. We can discuss this during implementation.
- MJ: Do you see that as a work group that rolls up its sleeves and develops modules or one that is about coordination?
- MH: I think coordination. Rolling up your sleeves is a lot to ask.
- PS: The coordination might have to do with pooling resources and understanding what others are doing. But you still need people who are willing to do the work.
- FN: It might be helpful to have a coordination group with subcommittees that might choose to take on tasks.
- PS: But you've got to work to be on a work group. If you just want to know what's going on, come to the Council meetings.
- BMo: It's easy enough to decide as a council to decide if a working group should consider. But we all represent educators and networks of educators. It's important that we're all getting buy in from our networks that these efforts will be valuable. ‘
- LK: I think we've all learned a lot about working groups that work and working groups that don't work and we can bring those perspectives in during implementation planning.
- PK: In OER we are taking a different approach. Ours are tied to our expeditions so we are in many ways not at liberty to come up with a new sequence. Our work supports the intent of the NGSS. In some cases it's a tight fit, in other cases it's not. As the NOAA education committee we can all agree that it's a great way to teach science and get behind it.
- Marine Debris numbers were included in NOS.

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**Distance Learning Working Group Report Out (*Input Requested*) - Bruce Moravchik and Peg Steffen (15 min presentation/ 15 min discussion)**

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See presentation

- LK: This Distance Learning Network (DLN) is going to be funded for FY15, is it likely to be funded in FY16?
- BMo: It was almost not funded in FY15.
- PS: It might be work a conversation with program managers.
- LK: Let's take this conversation offline.
- BMo: Organizing something like this does not require as much time and effort as something like NGSS, and we can still get it out there quickly. It's much faster to produce and package. And getting it from a broadcast piece to a standalone module is not a big ask.
- FN: We did three classrooms in ours and it was a lot of work. What's the wider vision of how this works? What are the numbers or engagement for DNL in a year?
- PS: Capacity is large, but I don't have it off the top of my head. There are 10 centers doing up to 6 presentations per day with up to 3 classrooms per presentation.

- BMo: Anyone with a Promethean board can make it happen. The trainers work within their own systems. It's a tight piece and it provides a positive medium without actually needing to be there in person. As far as numbers go, it depends on how it's advertised. There is an online catalog.
- PS: This is self-driven. Once someone gives a talk it is in the catalog. We don't have to be there.
- FN: Sometimes question and answer can be challenging even when the presentations work out fine.
- BMo: These are very tightly scripted. There is a NOAA point of contact. They can follow up with resources with their teachers.
- PS: It would be good if we could assist NASA in keeping this asset going forward.
- LHR: This has a lot of potential. The point of having Ed Council coordination for partnerships at the NOAA-wide level so we can decide on our priority topic issues. I'm looking at a partnership with Mad Science now. I work with Fisheries so I know the fisheries issues, but it would be important to have a working group to get at NOAA-wide priorities.
  - SS: I do too. I think it makes sense to continue expanding to include NOAA educators and getting priorities out there to them.
  - NJ: We had a meeting with Raytheon, one of our partners, and they were very interested in Weather Ready Nation (WRN). They wanted a NOAA perspective so I contacted people in the room to give the input. It was a successful meeting. Sometimes it's not about the priorities of our organization, but having the contacts to help the project be successful.
  - PS: WRN would fit nicely into a DLN module and probably get a lot of traction in elementary classes.
  - RG: NWS needs clearance from General Counsel to proceed. NESDIS has the contract.
  - PS: You can write in to your contract that all products developed as a result of the partnership are public domain and become property of NOAA.
  - NJ: Other groups have worked on it, but I will double check.
- BMo: NASA DLN has great people working on delivery to maximize its effects. They also have solid rubrics for setting up materials for these efforts.
- LK: This working group has clearly done some great work and has had some big bumps. DLN threatened to go away in the FY15 budget – but we've learned a lot about how to communicate our work in ways that are effective. Learning from experts is really important. Job well done and thank you. Bruce, you have become our expert in webinar technology.
- FN: In other conversation with other agencies working on climate education, the top priority after funding is marketing and outreach. The larger objective is connecting our investments with practitioners. We are under performing with our market. DLN and others are part of this, but there's a bigger issue. How do we get at more educators?
  - BMo: Education marketing working group?
  - FN: It's really about reach, and marketing is a tool for reach.

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**Partnership Working Group Report Out (*Input Requested*) - Frank Niepold and Diana Payne (15 min presentation/ 15 min discussion)**

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See presentation and report.

- RG: This is very relevant. In our WRN Strategic Plan, we state that we cannot accomplish all we need to do without partnerships, including those outside of the weather enterprise.
- FN: We're trying to be much clearer about what we mean by "partner." It can be vague.
- FN: Possible next step is considering cost benefit analysis beyond Sanctuaries.
  - DP: There is only a small subset in which we have enough data to do this and do it well. Need to keep in mind non-monetary benefits.

- LK: Partnerships was very good and addressed major issues that the National Academy of Sciences had challenged us about. I used it to show present to CFO for funding, and it actually worked. The additional data that was generated in this report was extremely important for making the case for continued investment. In the Strategic Plan it's clear that we are making the importance of our partnerships known, more so than last year, and this report is contributing to this as well. Thank you to all of you who worked on the report.
- LHR: The report has been valuable in the field as well. Most of the partnership were regional level partnerships or specifically with one Line Office. One of the difficulties I have coming from a Line Office is looking at partnerships that ought to be made at a NOAA level. Maybe we could talk offline.
  - DP: Two things you should know about how the case studies were selected. Anyone who received the survey was asked about high return partnerships. We were limited in scope. One thing we didn't do that the study recommended is talk about internal NOAA partnerships.
  - FN: As a partnership matures and shows wider benefits to NOAA, how does that conversation expand? That's still unclear at this time how they can expand into other domains of our mission. High returns can begin to expand into other domains of our mission. The other side is how to document a partnership in a way that's useful. Case studies offer a template for how to document partnerships.
  - SSp: There were characteristics that were identified for high return partnerships. There are ways to decide whether and when a partner is ready to extend outside of a Line Office. Partnerships are handled very differently. For example, AMS is handled very differently from Exploratorium. I understand the need for mapping out a process for raising the visibility of the partnership. There isn't one trajectory.
  - FN: But there are paths that have been worn. Determining which one is the closest could be valuable.
- CMc: RP and I are in the process of establishing a new Memorandum of Understanding (MOU) for Exploratorium partnership. We are making updates including the establishment of a NOAA Executive Order: NOAA employees have the ability to work in official time on external efforts. At one point, one of the reviewers said that it should be taken out because it was unnecessary in a legal document. We have tried to maintain that this stay in the MOU because the MOU informs NOAA employees that they can work on it. It informs them further that the NOAA Executive Order exists. This type of language can help inform NOAA folks on how they can engage with it – provide more “cover” to get in engaged.
  - FN: When we talk about the archive of MOUs it's about the evolving state of MOUs. If we knew that you had already gone through those paths, we could improve the templates. Seeing language makes it easier for others to see.

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**Strategic Plan Update: New Timeline and Goal Front Matter Writing Sessions (*Input Requested*) - Marissa Jones (5 min presentation/ 10 min discussion)**

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See presentation.

- LN: Do those of you with networks of networks think that a 5 week internal review period over the holidays is feasible? We're relying on you to get it out to your communities.
- LK: NERRS, Sea Grant, and Sanctuaries stick out as those with the largest internal networks.
  - DP: 5 weeks for internal review seems feasible, but we would have to have a tight turnaround time to have time to collate the comments.
  - LK: That collating time is really important because to it would be helpful to have Sea Grant as close to one voice as possible.
  - LHR: I will do that with the Fisheries educators as well.

- MMc: I think the timeframe is feasible--especially being over the holiday (might be somewhat slower time for folks). Early Jan is good for me to work on it.
- LN: We will likely need your support when incorporating comments from external reviewers. It's probably not feasible to have one person field them all. We will be relying on your content expertise.
  - LK: MJ mentioned that she will probably involve you in Goal teams in a process similar to the brainstorming sessions for the goal narratives. Please be prepared to be involved during that time.
- FN: It's important to think about process of how to deal with public comments.
  - LK: We would utilize the process Steve used with the last document.
  - MJ: Frank, I would like to understand how you methodically recorded your responses in practice. If you or anyone have examples of the mechanics of this process, please let me know.

**Opportunity to support Department of Education's 21st Century Community Learning Centers  
(Input Requested) - Louisa Koch (15 min discussion)**

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See [Google Document summary](#)

- LK: Before we go ahead with soliciting ideas, we wanted to ask to find out who might be interested in being involved or being a lead. Do we want this to be a NOAA activity, or reach out to our partners? My core concern that we do a good job, especially because \$50,000 has to go toward evaluating the process. Are people enthusiastic about this?
- PS: NOAA provides the staff?
  - LK: NASA brought staff from the learning centers and did live training. The interaction with the students in the Learning Centers was entirely digital.
  - PS: So there's no classroom management?
  - LK: Yes, I believe if we do it digitally we would train staff but not interact directly with students.
- LHR: It would be helpful to see where the partners are located. In the past we have partnered with Immersion Learning on a marine mammals program that they disseminated through their network of Boys and Girls Club programs. We might have resources that could work for this because they are designed for after school situations and don't require technical equipment.
  - LK: Department of Education asked the states if they were interested in NASA's products and the states got back with centers. The Park Service said that they needed centers to be within an hour of a national park and attend it. Partner organizations can determine which centers are able to contribute. Institute for Library and Museum Sciences passed money on to Exploratorium to do maker activities.
  - LRH: Do we want to have the same activities for NOAA, or have it vary regionally?
  - LK: There's only \$250K (after taking out evaluation), so we need this to be as simple as possible.
- PS: NASA did design challenges and leveraged DLN experiences. It's going to require expertise to develop the designed experience in an authentic STEM experience in a way that's effective. This should probably be a contractor, but they have to have experience.
- AC: This is a small amount of money to do what they're asking for. It would be challenging to develop this at NOAA. There are folks in the field that already do these things and are ready to go with rigorous activities. It might have more success if we go through partners. They have the contacts and materials that would be appropriate. It doesn't have to be B-WET, but we could try to give it a shot with B-WET in the Gulf.
  - LK: None of the \$250 could be spent on federal employees.

- PS: I agree that we should find someone who is already experienced with this in our partners. Need someone who knows NOAA.
- FN: The authentic STEM experience could also go with CoCoRaHS and citizen science. It is simple and nationwide. They are the most benefit for the least amount of money.
  - PS: Combined with WRN and digital badges, these are low hanging fruit. Lots of ornaments that we can hang on the tree.
  - AC: Do they have experience working with K-12?
  - SSch: Yes, they have a person on staff who does that full time.
- LK: I am hearing that we can talk to our keystone partners including CoCoRaHS, B-WET, and Immersion Learning. I think it makes sense to approach these partners and see what they think.
  - FN: I like the idea of exploring with several partners.
  - LK: Do we have a financial vehicle to get to CoCoRaHS?
  - SSch: We have a cooperative agreement.
  - PS: Let the partners know that we are happy to provide resources and support.
- AC: Is this FY15 funding? What's the timeline?
  - LK: We're still waiting for the MOU. Probably Fall 2015 at the earliest, FY15 money obligated at the end of FY15, implementing in FY16.
  - SSch: Need MOU in place by spring 2015 for funds to be obligated by the end of FY15.

## Updates and Announcements

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- LK: Should we do a briefing for NOAA Ed Community to make them aware of additional funding opportunities? This includes prospective PIs, grantees, etc.
  - FN: Yes, our partners would be interested. Some of the other funding sources have gone away, so they are looking for options.
  - AC: In the Gulf we did a pilot of that and I think a larger version of that would be helpful. It went over very well.
- NJ: George Director of Communications in NESDIS is leaving to support Integrated Ocean Observing System as the Chief of their region, budget, and policy office.
- LHR: Pacific Marine Expo is going on in Seattle this week. NOAA is broadly involved and has a booth. We also distribute the Seafood 101 insert that was distributed in the Seattle Times.
- PK: Challenger Center in DC area is interested in an ocean exploration based mission. I am working with Craig McLean and trying to find who would be subject matter experts. We have a mission coming up in the end of November to the South Pacific. There will be video and daily mission logs.
  - LK: I thought they got an NSF Grant?
  - PK: No, they got a Dept. of Education grant. Working with schools in Virginia.
- MMc: The Sea Grant Education Network is attempting to form a professional learning group (PLG) to address better impact data collection and reporting. This group will be building on some recent efforts with John Baek and Roseanne Fortner (and John and Roseanne will hopefully be providing input to the PLG). Very early stages yet, but hopefully this will result in better education "stories" coming out of Sea Grant in the future.
  - LK: We would be happy to support and learn from this as it moves forward.
- KJ: Post Educational Partnership Program (EPP) Forum closeout activities are underway. The next one will be at the City University of New York. Hollings and EPP scholarships – over 1000 log in accounts have been created. Over 160 started so far for EPP.
- LH: We do not quite have our grant released yet, but it should be out soon.
- RG: We are working on weather oceanographic apps with the Smithsonian. It is in beta now. 166 people have signed up, 71 are from NOAA.



- FN: Office of Science Technology Policy (OSTP) officially released that they are going to do a climate literacy and education effort. Expanding and building on successes we've had to date. We will find out details probably in early December. Convene at the White House - scientists, educators, public, private, entrepreneurs. Peg and I are going to the National Science Teachers Association meeting to see if we can make something work.
- BMo: Finished review of product on coral to be transferred to be an ebook. We are beginning a process for applications to Climate Stewards, this year with introductory webinars.
- SR: I am taking over as content manager for [education.noaa.gov](http://education.noaa.gov).
- TF: The NOAA Education Network listserv that Sarah, John and I have worked on now has 116 people signed up. Any email sent to the listserv goes to everyone on the list. 71 on the list from within NOAA. The rest tend to have state government or .edu addresses. A few .coms and .orgs. Also, thanks to Ron, we were able to get a room at AMS to have the discussion that came up with the Skywarn program and some of the needs for the future. I'll be sending out an invitation for that hopefully next week. I appreciate the feedback from the entire council when I presented on this a few months ago, and John McLaughlin and I had a call on this afterwards as well. If anyone is interested and will be at AMS, the meeting will be Tuesday night from 6-8 pm in the Phoenix Ballroom D at the Sheraton hotel.